

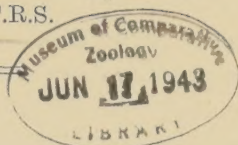
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Museum of Comparative
Zoology
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5. FISHES.

By G. A. BOULENGER, F.R.S.



GENERAL SKETCH.

PRIOR to 1858, when Dr. Günther commenced the classification of the Fishes in the British Museum, the arrangement of this collection had not received much attention, a large proportion of the specimens being unnamed. The principal accessions received at various times and incorporated in the Museum Collection had in many cases been named by the previous owners, or had formed the basis of special reports, *e.g.*, Mr. John Reeve's collection of Chinese Fishes, General Hardwicke's Indian Fishes, Dr. Parnell's collection from Scottish Rivers, Dr. Gronow's collection, Mr. Yarrell's British Fishes, and the collections made during the voyages of the *Erebus* and *Terror*, *Herald*, *Sulphur*, *Samarang*, *Rattlesnake*, etc. Dr. J. E. Gray had worked at certain groups, and in 1851 published a "List of the Fishes belonging to the order Chondropterygii," and Dr. J. J. Kaup, of Darmstadt, had been engaged to work out the Eels and Lophobranchii, and in 1856 produced a "Catalogue of Apodal Fish" and a "Catalogue of Lophobranchiate Fish." Dr. Günther's rearrangement of the collection proceeded concurrently with the publication of his classical catalogue. The first three volumes, dealing with the Acanthopterygii, were published in 1859, 1860 and 1861 respectively. Vol. IV., containing the Pharyngognathi and Anacanthini, was completed in 1862. The next three volumes, dealing with the Physostomi, appeared in 1864, 1866 and 1868 respectively, and the eighth and last volume, in which the Eels, Lophobranchii, Plectognathi, Dipnoi, Ganoidei, Chondropterygii, Cyclostomata and Leptocardii were included, was published in 1870. Since that time the assistants working at the collection (Messrs. O'Shaughnessy, Boulenger, and Regan) have been mainly occupied in naming and incorporating accessions, but in 1895 the first volume of a second edition of the Catalogue, written by Mr. Boulenger, and dealing with the Centrarchidæ, Percidæ, and part of the Serranidæ, made its appearance, the Fishes dealt with having been rearranged in their cases, and the preparation of a second volume is now in progress.

In 1858, when Dr. Günther commenced the arrangement of the general collection, it contained about 16,000 specimens, including the Haslar collection of 1600, and the Yarrell collection of about 650. In 1870, at the completion of the catalogue, the number had risen to 29,267, the increase having been at the average rate of 1000 specimens a year, the greatest number of accessions being received in the years 1860 (about 2000 specimens, including the East India Company's Collection of 950 Fishes), 1862 (1700 additions) and 1867 (1900 additions). Since 1870, the collection has increased at the rate of about 1275 specimens a year, the greatest number added in any one year being 6130 in 1889, when the Day collection of about 4600 specimens was received, and at the present day the total number of specimens in the collection amounts to about 73,000.

A CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL ACCESSIONS
TO THE COLLECTION OF FISHES.

Prior to 1839 the British Museum received the collection of Indian Fishes made by General Hardwicke, described and figured in Dr. J. E. Gray's "Illustrations of Indian Zoology," published in 1830-1832, and the Fishes collected in China by Mr. John Reeves and his son during the years 1812-1831 were presented to the Museum, together with a series of drawings by native artists, forming the basis of Sir John Richardson's "Report on the Ichthyology of China," published in 1845.

1839.

Dr. R. Parnell presented a collection of Fishes from Scotch rivers, including the types of the species described by him in his essay "On the Fishes of the Firth of Forth."

1844.

A collection of Fishes, mostly representing species described by Prof. Schlegel, was purchased from the Leyden Museum, and the Lords of the Admiralty presented the collections made during the voyage of H.M.S. *Erebus* and *Terror*, and H.M.S. *Sulphur*, described by Sir John Richardson in his Reports, and containing many types.

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1845.

A series of Fishes of the Red Sea, representing species described by Dr. Rüppell, was purchased of him.

1846.

Fishes from Australia were presented by Mr. J. B. Jukes, of H.M.S. *Fly*, and from Madras by Mr. T. C. Jerdon.

1847.

The collection made during the voyage of H.M.S. *Samarang*, including the types described by Sir John Richardson in his Report, was presented by the Lords of the Admiralty, and the Earl of Derby presented the Fishes obtained by Mr. McGillivray during the voyage of H.M.S. *Fly*.

1848.

Dr. R. Parnell presented a collection of Fishes from North America and the West Indies, and Lieut. Spence, R.N., a series from Plymouth.

1850.

Mr. J. M. McGillivray presented the collection of Fishes made by him during the voyage of H.M.S. *Rattlesnake*, and a series from Egypt was purchased of Dr. Rüppell.

1851.

Sir Andrew Smith presented a series from Cape Colony, many being the types of species described by him.

1853.

The collection of Dr. L. T. Gronow, a learned ichthyologist of Leyden, who died in 1777, was purchased at an auction sale in London, together with a MS. catalogue and many original drawings.

1855.

The collection of the Royal Naval Hospital of Haslar was presented by the Lords of the Admiralty, and the Zoological Society presented a series of Fishes selected from their collection,

including many types of species described in the Transactions and Proceedings of the Society.

1856.

The collection of British Fishes made by Mr. W. Yarrell, containing the types of the species described by him, was acquired, and the Fishes obtained during the voyage of H.M.S. *Herald* in the Pacific, described by Sir John Richardson, were given by the Lords of the Admiralty.

1858.

A large number of Fishes from Amboyna, Sumatra, etc., collected and described by Dr. Bleeker, was purchased of him.

1859.

The Hon. East India Company gave a collection of Indian Freshwater Fishes, including the types of the species described by M'Clelland. The Rev. R. T. Lowe presented Fishes from Madeira and the Canary Islands in this year, and also in 1860, 1863, and 1864, including the types of the species described by him. Fishes from Vancouver's Island were presented by Dr. Lyall, of H.M.S. *Plumper*, and from Australia by Dr. G. Bennett.

1860.

The entire collection of the Hon. East India Company, containing the types of the species described by Dr. Cantor, was presented by them, and a series from the New Hebrides by Mr. J. McGillivray.

1861.

Fishes obtained by Mr. J. Y. Johnson at Madeira, including the types of new species described by him, were presented in this year, and also in 1862, 1863, and 1864. A collection made by Capt. Dow in Panama, containing the types of many new species described by Dr. Günther, and a series from Cambogia, obtained by M. Mouhot, were presented.

1862.

From Dr. Bleeker was obtained a series of Labridæ and Pleuronectidæ from the Malay Archipelago, containing the types of the species described by him. Mr. J. Petherick, H.M. Consul at Khartoum, presented a large collection of Fishes from the Nile in this year and in 1863, described by Dr. Günther in

the Appendix to Petherick's "Travels in Africa," and Mr. R. Swinhoe, H.M. Consul at Formosa, a collection from that island. Fishes from Natal were sent by Mr. T. Ayres, and from the Pacific by Mr. Raynor.

1863.

A collection of Indian Siluridæ, including all the types of the species described by Dr. Bleeker, was obtained from him, and the types of the species described in Mr. Bennett's "Fishes of Ceylon" were received. The Rev. Charles Livingstone presented a series of Fresh-water Fishes from East and Central Africa, described by Dr. Günther, and Captain Mitchell a large collection from Madras.

1864.

Sir Lambert Playfair presented a collection of Fishes from Zanzibar, which, with those subsequently sent by him in 1865, 1866, and 1867, formed the basis of Günther and Playfair's "Fishes of Zanzibar," and contained the types of the species therein described. A second series of the East Indian Pharyngognathi described by Dr. Bleeker was received from him, and the collection made in Palestine by the Rev. H. B. Tristram was obtained. Mr. G. Krefft presented collections of Australian Fishes, illustrating the species described by him, and Captain Dow, a collection from Central America, including the types of species described by Dr. Günther.

1865.

Messrs. Godman and Salvin presented a collection from Central America, containing many types, and with those presented by Captain Dow in 1861, 1864, and 1867 forming the basis of Dr. Günther's "Fishes of Central America." Fishes from India were presented by Mr. F. Day, from Siam by Sir R. Schomburgk, and from China by Mr. R. Swinhoe.

1866.

From Dr. Bleeker was received a collection of East Indian Cyprinidæ, containing a complete series of types of the species described by him.

1867.

Series of the typical examples of the Clupeidæ, Eels, Gymnodontes, Lophobranchii, Sharks, and Rays, described by Dr. Bleeker, were obtained from him.

1868.

Mr. F. Day gave a collection from Southern India, containing types of new species described by him, and a series of Fresh-water Fishes from Minas Gerães, including the types of species described by Prof. Reinhardt, was presented by the Copenhagen Museum. Mr. J. C. Melliss presented a fine collection from St. Helena, and the Marquis G. Doria one from Borneo

1869.

A series of types was obtained from the Godeffroy Museum. Dr. R. O. Cunningham presented the South American Fishes collected by him during the Magellan Straits Survey Expedition, and Messrs. Blanford and Jesse those obtained by them during the Abyssinian Expedition.

1870.

Collections of Fishes from India were presented by Mr. F. Day and Mr. T. C. Jerdon.

1871.

A large collection from Australian coasts and the South Pacific, containing the types of many of the species described by Dr. Günther in the "Fische der Südsee," was obtained from the Godeffroy Museum, and from Dr. Klunzinger was received a series, including the types of most of the species described by him from the Red Sea. A collection from Australia was presented by the Australian Museum, Sydney, one from Tasmania by Mr. Morton Allport, and one from the South Pacific by Mr. J. L. Brenchley. Large series of Marine Fishes, obtained by Dr. A. B. Meyer at Manado, Celebes, were acquired in this year and in 1872.

1872.

The total number of accessions was first recorded, being 1238. These included a large collection of Fresh-water Fishes from Bengal, presented by Mr. T. C. Jerdon, and one from Tasmania, containing the types of many new species described by Dr. Günther, presented by Mr. Morton Allport. From the St. Petersburg Museum was received a series of Fresh-water Fishes of S.E. Russia, and from the New Zealand Institute one of Fishes of New Zealand.

1873.

The number of specimens received was 1014. A series from the South Pacific, including many types of species described by Dr. Günther, was obtained from the Godeffroy Museum, and a large collection made at Shanghai and Chefoo by Mr. R. Swinhoe was acquired.

1874.

The accessions totalled 618. Collections from the South Pacific were presented by the Rev. S. J. Whitmee in this year and in 1875, and included many types of species described by Dr. Günther. The Fishes obtained by Dr. Rein and Prof. von Fritsch during their travels in Morocco were received.

1875.

The additions numbered 513, and included a further collection from Tasmania, presented by Mr. Morton Allport, and a series from Lake Baikal, received in exchange from the Warsaw Museum.

1876.

The total number of accessions was 718, including a collection from Rodriguez and Kerguelen Land, made during the "Transit of Venus" Expedition, and one from the Rio das Velhas, Brazil, containing many desiderata, received from the Copenhagen Museum.

1877.

The accessions totalled 297, and included a series from Polynesia, purchased of the Godeffroy Museum, and a collection made during the Arctic Expedition, both containing types of species described by Dr. Günther.

1878.

The additions numbered 449, the most important collection being one made in Japan by Mr. H. B. Joyner, containing the types of many new species described by Dr. Günther.

1879.

1414 specimens were received. The collection made by Dr. Coppinger, of H.M.S. *Alert*, in the Straits of Magellan and the South Pacific, including the types of the species described by

Dr. Günther, was presented by him in instalments during this and the three following years. A series from various parts of the Russian Empire was received in exchange from the Imperial Academy of Sciences at St. Petersburg.

1880.

The number of accessions was 917. The Shore Fishes obtained during the voyage of H.M.S. *Challenger*, including the types of the species described by Dr. Günther in his Report, were presented by the Lords Commissioners of the Treasury. The Smithsonian Institution presented a series from the Atlantic Coast of the United States, and one of Fresh-water Fishes of the United States, including the types of 28 species described by Prof. Jordan, was acquired, as was a collection made in Ecuador by Mr. C. Buckley, containing the types of many new species described by Mr. Boulenger.

1881.

The number of specimens added to the collection was 866. These included a series from the Pacific, purchased of the Godeffroy Museum, and described by Dr. Günther, and some rarities from Madeira, presented by Mr. J. Y. Johnson.

1882.

The accessions numbered only 164.

1883.

The specimens received totalled 1373. Collections of Fishes from the United States, Jamaica, Chili, Hawaii, New South Wales, Singapore, Madras, and Norway, were obtained from the "International Fisheries Exhibition." A series of Fishes belonging to species described by Dr. Sauvage was received from the Paris Museum, and Dr. Nüsslin presented the types of the species and varieties of *Coregonus* described by him from the Swiss Lakes.

1884.

The number of accessions was 551, including a series from the United States, representing species described by Prof. Jordan, and one from the Niger, obtained by Mr. W. A. Forbes.

1885.

The additions numbered 485. Mr. A. S. G. Jayakar presented a collection made by him at Muscat, Arabia, this being the first of a series of collections from that locality presented by him in 1885, 1888, 1889 and 1891, each of which contained types of new species described by Mr. Boulenger. Collections made by Dr. von Ihering in the Province Rio Grande do Sul, Brazil, described by Mr. Boulenger, were purchased in this year and in 1886 and 1891. A series of Atlantic Fishes was received from the Christiania Museum, and one of American Fishes from the Museum of Comparative Zoology, Cambridge, U.S.A.

1886.

The additions were 486 in number, including a collection from New Zealand: purchased.

1887.

1248 specimens were added to the collection. The Deep-sea Fishes collected during the voyage of H.M.S. *Challenger*, including the types of the species described by Dr. Günther in his Report, were presented. Mr. F. J. Jackson gave a collection from East Africa, and a series from Indiana and Florida was obtained from the Indiana University.

1888.

The additions numbered 1569. The collection made by Dr. Dickson at Constantinople was presented by him, and Fishes from the Yang-tse-Kiang, collected by Mr. F. W. Styan, including the types of new species described by Dr. Günther, were received in this year and in 1889.

1889.

The specimens received were 6130 in number. The collection of Fishes bequeathed to the Museum by Mr. F. Day, contained 4400 Indian Fishes, representing species described by him in the "Fishes of India," and 155 British Salmonidæ. The Pelagic Fishes obtained during the *Challenger* Expedition, including the types of the species described in Dr. Günther's Report, were presented. A series from North America was presented by the United States Fisheries Commission, and one of South American Siluridæ, containing many types, was received from the Museum of Comparative Zoology, Cambridge, U.S.A.

1890.

1587 additions were made to the collection. Fishes obtained during the French *Talisman* and Cape Horn Expeditions, mostly duplicates of bathybial species described by Prof. Vaillant, were received from the Paris Museum. A series of Deep-sea Fishes from the Indian Ocean, obtained during the survey of H.M.S. *Investigator*, was procured from the Indian Museum, Calcutta; this contained co-types of many of the species described by Dr. A. Alcock, as did each of the series subsequently received in 1891, 1895, 1896 and 1898. Mr. J. Y. Johnson presented 13 Deep-sea Fishes from Madeira, including the types of 4 new species described by him, and Sir J. Murray 76 specimens from off the Scottish Coast. Prof. A. Agassiz gave a number of Brazilian Fishes, mostly obtained during his father's expedition; and a collection from Australia was transferred from the Imperial Institute.

1891.

The accessions numbered 1772. The collection made by Dr. and Mrs. Eigenmann in British North America and California, including the types of the new species described by them, was purchased in this and the two following years. A series from various parts of the Russian Empire, including the types of many species described by Dr. Herzenstein, was received from the St. Petersburg Museum. A collection made in China by Mr. A. E. Pratt, containing the types of new species described by Dr. Günther, and one from the Sittang River, Burmah, made by Mr. E. W. Oates, and including several desiderata, and types of new species described by Mr. Boulenger, were presented. Series from Ceylon and from the coast of Ireland were given by Mr. H. Nevill and Dr. Grenfell respectively.

1892.

1582 specimens were received, including a collection from the West Coast of Ireland, presented by the Royal Dublin Society, one of Fresh-water Fishes from Siberia, obtained from the St. Petersburg Museum, and one from Matto Grosso, Brazil, including many rarities and the types of new species described by Mr. Boulenger, presented by Messrs. Moore and Evans

1893.

The accessions totalled 1599. Mr. E. W. Oates presented a collection from the Shan States, containing the types of new species described by Mr. Boulenger, and one made in Borneo by Mr. A. Everett was purchased. A series selected from the collection made by Signor L. Fea in Burma, including the types of many species described by Dr. Vinciguerra, was purchased.

1894.

The additions to the collection numbered 901. Fishes from Borneo were presented by Rajah Brooke and Mr. C. Hose, and from Chili by Prof. F. Lataste. A series from Mexico, representing species described by Dr. J. H. Bean, was received in exchange from the National Museum, Mexico, and another from North Mexico, including the types of several species described by Mr. A. J. Woolman, was purchased.

1895.

The accessions were 670 in number. A collection made during the Hopkins's Expedition, from the West Coast of Mexico, containing the types of several new species described by Prof. Jordan, and one from the River Paraguay, made by Dr. Ternetz, including the types of many new species described by Mr. Boulenger, were purchased. A series from Madeira was presented by Messrs. C. Baring and W. R. Ogilvie Grant, and another, obtained during Dr. Donaldson Smith's Expedition to Lake Rudolf, containing the types of some new species described by Dr. Günther, was purchased.

1896.

The additions numbered 1004. From the Smithsonian Institution was received a series of 362 specimens from the deep sea off the coast of North America, including the types of many species described by Messrs. Goode and Bean and Dr. S. Garman. Fishes from the Ogowe River, collected by Miss Kingsley, including the types of several new species described by Dr. Günther, were purchased. A collection from the Shiré River was presented by Sir Harry Johnston, one from Brazil by Dr. Goeldi, and one from the Upper Congo by the Rev. J. W. Weeks, all three containing types of new species described by Mr. Boulenger.

1897.

The additions totalled 1359. In this and the four following years Mr. F. W. Townsend presented collections from the Persian Gulf, Kurrachee, and the Mekran Coast, containing many desiderata and the types of several new species described by Mr. Boulenger. A series from the Russian Empire, including the types of many species described by Prof. Kessler, was received from the St. Petersburg Museum. A collection made by Dr. J. Bach in the River Jurua, Brazil, and one from the Upper Congo, were purchased; both contained types of species described by Mr. Boulenger. Sir Harry Johnston presented a collection from Nyassaland, Mr. J. Stanley Gardiner one from Rotuma, and Dr. Goeldi another from the Amazon. Part of a collection made in Bolivia and Argentina by Dr. Borelli was received from the Turin Museum.

1898.

The additions were 2111 in number. The Secretary of State of the Congo Free State presented collections from the Congo Free State in this and the two following years, these forming to a great extent the basis of Mr. Boulenger's work, "Les Poissons du Bassin du Congo," and including co-types of the new species described by him and figured in the "Annales du Musée du Congo," 1898-1902. The Royal Society presented the Fishes obtained by Mr. J. E. S. Moore in Lake Tanganyika, including the types of numerous new species described by Mr. Boulenger in his report. A series of Siamese Fishes was received from the Royal Siamese Museum, and another from Ecuador, obtained by Dr. H. Festa and including several types, from the Turin Museum. Dr. J. D. F. Gilchrist gave collections from the Cape of Good Hope, including examples of several new or rare species, in this year and again in 1900 and 1902.

1899.

1128 specimens were received. A series from the Russian Empire, including many types, was obtained from the Imperial Academy of Sciences at St. Petersburg. The collection made by Mr. R. T. Günther on his expedition to Lake Urmi, and that made by Messrs. W. R. Ogilvie Grant and H. O. Forbes at Socotra and Abd-el-Kuri, were presented by the Royal Society. General Lugard gave a series from the Upper Niger.

1900.

The number of specimens received was 1144. Dr. D. S. Jordan presented a series of co-types of species described by him from Alaska, and a collection of 258 specimens from the Pacific, mostly co-types of species described by him was purchased, as was one from the Senegal, made by M. Delhez.

1901.

The additions numbered 1265. Sir George Newnes presented the Fishes obtained during the *Southern Cross* Antarctic Expedition, including the types of the new species described by Mr. Boulenger in his Report, and Mr. J. Stanley Gardiner a collection from the Maldivé Islands, forming the basis of a Report by Mr. Regan, and containing the types of the new species described by him. The Secretary of State of the Congo Free State presented a series from the Ubangi, including co-types of several species described by Mr. Boulenger, and Dr. W. J. Ansorge the types of eight new species from Nigeria, also described by Mr. Boulenger. A series from the Atlantic Coast of Central and South America, including the types of several species described by American authors, was purchased.

1902.

The accessions totalled 1685. The Director of the Royal Natural History Museum, Brussels, presented a series of fishes from the Congo, containing co-types of several new species described by Mr. Boulenger. Mr. F. W. Styan sent a small but valuable collection from Shanghai, and one from Morocco, made by Herr Riggenbach and described by Dr. Günther, was purchased. Large series of Fresh-water Fishes collected by Dr. W. J. Ansorge in Southern Nigeria and by Mr. G. L. Bates in Cameroon and the Gaboon, including the types of many new species described by Mr. Boulenger, were acquired. Mr. R. Gordon Smith presented a collection made by him in Japan, containing many desiderata. The Fishes collected by Mr. E. Degen in Abyssinia prove to be of great interest, examples of all the species described by Rüppell having been obtained, besides many hitherto unknown, which have been described by Mr. Boulenger.

1903.

The accessions totalled 1744. A collection from Japan, including co-types of several species described by Dr. D. S. Jordan, was acquired, as was a large series from Panama, including co-types of many species described by Dr. Jordan and other American authors. Dr. Günther presented a collection from the Gold Coast made by the late Mr. R. B. N. Walker and described by the donor. Other important collections containing examples of new species were one made by Mr. G. L. Bates in South Cameroon and one from the Coast of Natal, presented by Mr. J. F. Quekett, which were described by Mr. Boulenger, and a collection made in the Andes of Venezuela by Sr. Briceño and one from Rio Janeiro, presented by Dr. E. A. Göldi, which were described by Mr. Regan.

1904.

1530 Fishes were added to the collection. H.M. the King of Portugal presented a series from the coast of Portugal, mostly examples of large size taken at considerable depths. Dr. J. D. F. Gilchrist presented a collection from the seas of South Africa, including co-types of several species described by him. A series of Fresh-water Fishes from Cuba, including specimens of the Blind Cave-fishes, previously unrepresented in the collection, was received from Prof. C. H. Eigenmann. A collection made in Angola by Dr. W. J. Ansorge was acquired. Important collections described by Mr. Boulenger, and containing examples of several new species, were a second one made by Mr. G. L. Bates in South Cameroon, one from Uganda and the Niger, presented by Mr. J. S. Budgett shortly before his death, and one from Lake Victoria, presented by Colonel Delmé-Radcliffe. Mr. F. W. Townsend presented a collection from the Persian Gulf and the Sea of Oman; a series from Thibet was received from Captain H. J. Walton, and one from Yunnan from Mr. John Graham. These were described by Mr. Regan and included the types of many new species.

ALPHABETICAL LIST OF THE MORE IMPORTANT CONTRIBUTORS
TO THE COLLECTION OF FISHES.

Admiralty, Lords of the.

The collection of Fishes made during the voyage of H.M. Ships *Erebus* and *Terror*, under the command of Captain Sir James Ross: presented in 1844.

The Fishes collected during the voyage of H.M.S. *Sulphur*, under the command of Captain Sir Edward Belcher: presented in 1844.

The Fishes obtained during the voyage of H.M.S. *Herald*, under the command of Captain Kellett: presented in 1856.

The above collections were separately reported on by Sir John Richardson, and they contain the types of the new species described by him.

Bleeker (PIETER). [1819-1878]

The Fishes received from Dr. Bleeker during the years 1859-1867 included all the types of the species described and figured by him in the first four volumes of the "Atlas Ichthyologique," and also the types of many species described in the later volumes. The British Museum Collection contains the types of the Siluridæ, Cyprinidæ, Clupeidæ, Muraenidæ, Labridæ, Pleuronectidæ, Gymnodontes, Lophobranchii and Elasmobranchii described by Dr. Bleeker.

Congo Free State, Secretary of State of the.

The collections presented during the years 1898-1901 formed, to a great extent, the basis of Mr. Boulenger's work, "Les Poissons du Bassin du Congo," published in 1901, and contain co-types of the new species described therein, and figured in the "Annales du Musée du Congo," 1898-1902.

Coppinger (RICHARD WILLIAM).

During the survey of H.M.S. *Alert* in the years 1880-1882 Dr. Coppinger made collections of Fishes from the Straits of Magellan and the South Pacific, and presented them to the Museum, where they have been reported upon by Dr. Günther.

Day (FRANCIS). [1829-1889]

A large collection of Fishes made by Mr. Day and bequeathed by him to the Museum, was acquired at his death in 1889. It included 4400 Indian Fishes and 155 British Salmonidæ, many of them being co-types of the species described by him in the "Fishes of India," or illustrating his account of the "Fishes of Great Britain," and "British and Irish Salmonidæ."

Dow (J. C.).

Fishes obtained by Captain Dow in Central America and presented by him to the Museum in 1864, 1864, and 1867, formed, with the collections made by Messrs. Godman and Salvin in 1859 and 1865, the basis of Dr. Günther's "Fishes of Central America," published in the "Transactions of the Zoological Society" in 1868.

Hon. East India Company.

A collection of Fresh-water Fishes of India, containing the types of the species described by M'Clelland in his memoir on "Indian Cyprinidae," published in 1839, was presented in 1859, and in 1860 the East India Company presented their entire collection of Fishes, including the types of the species described in Dr. Cantor's "Catalogue of Malayan Fishes."

Eigenmann (CARL H.) and (ROSA SMITH).

During the years 1891-1893 more than 1400 specimens of Fishes from Canada, British Columbia, and California, were purchased of Dr. and Mrs. Eigenmann, including the types of all the new species described by them from British North America.

Fea (LEONARDO).

In 1893 a series of Fishes, selected from the collection made by Signor L. Fea in Burma, containing co-types of most of the new species described by Dr. Vinciguerra, was purchased.

Godeffroy Museum, Hamburg.

From 1869-1881 many desiderata, including types, were received from the Godeffroy Museum. These were principally from the Australian coasts and the Pacific, and, with Whitmee's collections, formed the basis of Dr. Günther's "Fische der Südsee," published in the Journal of the Godeffroy Museum.

Godman (FREDERICK DU CANE). [1834-]

See Dow.

Gronow (LAURENCE THEODORE). [1730-1777]

The collection of Dr. Laurence Theodore Gronow, better known by his latinised name of Gronovius, was purchased at an auction in London in 1853, together with 84 original drawings, and a manuscript catalogue, which was printed in 1854 by the authorities of the British Museum. Dr. Gronow was a Senator of Leyden, and one of the best ichthyologists of his time.

Hardwicke (THOMAS) [-1835]

The collection of Indian fishes made by General Hardwicke, including the types of the species described and figured by Dr. J. E. Gray in the "Illustrations of Indian Zoology," published in 1830-1832.

Haslar, Royal Naval Hospital of.

See SMITH.

Indian Museum, Calcutta.

Deep-sea Fishes of the Indian Ocean, obtained during the survey of H.M.S. *Investigator*, including many co-types of species described by Dr. A. Alcock, have been received in exchange from the Indian Museum during the years 1890-1898.

Johnson (JAMES YATE).

Fishes obtained at Madeira by Mr. Johnson, including the types of many new species described by him and by Dr. Günther, were presented by him in 1861-1864 and again in 1881 and 1890.

Leyden Museum.

A collection of Fishes from Japan, containing duplicates of many species described by Prof. Schegel in the "Fauna Japonica;" purchased in 1844.

Lowe (RICHARD THOMAS).

Fishes from Madeira, the Canary Isles, etc., collected and described by the Rev. R. T. Lowe, including many types, were presented by him during the years 1859-1864.

Newnes (Sir GEORGE).

The collection made during the voyage of the *Southern Cross* in Antarctic waters, containing the types of the new species described by Mr. Boulenger in his Report, was presented by Sir George Newnes in 1902.

Paris Museum.

Specimens from the French *Talisman* and Cape Horn expeditions, mostly duplicates of bathybial species described by Prof. Vaillant, were received in exchange from the Paris Museum in 1890.

Parnell (RICHARD). [-1882]

A collection of Fishes from the Firth of Forth and Scottish Rivers, containing the types of the species described by Dr. Parnell in his essay "On the Fishes of the Firth of Forth," was presented by him in 1839.

Playfair (Sir ROBERT LAMBERT). [1828-1899]

Collections of Fishes from Zanzibar, forming the basis of Günther and Playfair's "Fishes of Zanzibar," published in 1866, and containing the types of the new species described therein, were presented by Sir Lambert Playfair during the years 1864-1869.

Reeves (JOHN). [1774-1856]

The Fishes collected in China by Mr. J. Reeves and his son during the years 1812-1831, together with a series of drawings taken from living or fresh specimens, formed the basis of Sir John Richardson's "Report on the Ichthyology of China," published in 1845.

Salvin (OSBERT). [1835-1898]

See Dow.

Smith (Sir ANDREW). [1797-1872]

Fishes from the Cape of Good Hope, collected by Sir A. Smith, M.D., including the types of most of the species described by him in the "Illustrations of the Zoology of South Africa," 1838-1849. Some of these were presented by Sir A. Smith to the British Museum in 1851, others to the Royal Naval Hospital of Haslar, these latter coming into the possession of the British Museum in 1855, with the rest of the Haslar collection.

Smithsonian Institution.

In 1861 and 1880 collections of American Fishes were presented by the Smithsonian Institution, and in 1896 a large series of deep-sea Fishes from off the coasts of North America, including the types of many species

described by Messrs. Goode and Bean and by Dr. S. Garman, was received in exchange.

Treasury, Lords Commissioners of the.

The large collection of Fishes made during the voyage of H.M.S. *Challenger* in 1873-1876, forming the basis of three Reports, by Dr. Günther, *i.e.*, "Shore Fishes," published in 1880, "Deep-sea Fishes," 1887, and "Pelagic Fishes," 1889; and containing the types of the new species described in them. The different series were presented on the publication of the respective Reports.

Yarrell (WILLIAM). [1784-1856]

The collection of British Fishes made by Mr. Yarrell, forming the basis of his book, "British Fishes," published in 1835-1836, was received in 1856.

